

## THE EVOLUTION OF CHILD FIRE INVOLVEMENT

In a legal context the term “arson” is often not applied to child fire-setting because it is generally accepted that children as young as 10 years cannot form an “intention” to commit a crime. Sometimes the term “fire-play” is used as an alternative, yet many child development specialists and educators see this as a misnomer because, the word “play” connotes positive, learning activities. Statistically, however, it seems a consistent trend world-wide that a significant number of deliberately lit fires are started by juveniles. It raises the question, then, whether these young people have “always” lit fires or whether this is a relatively recent (and hopefully short-lived) occurrence for them. Despite the fact that arson continues to concern our communities, there is relatively little information that traces the progression of fire-starting across the lifespan of an individual. To go some way towards rectifying that imbalance, this paper provides an overview of the progression of fire involvement in childhood through to adolescence.

### **The nature of fire-setting in children**

It is widely accepted that fire behaviour follows a naturally occurring developmental sequence in children, with at least three distinct phases: fire interest; fire-starting; and fire-setting. Some authors (e.g., Barreto et al., 2004) have argued that there is no empirical support for these distinctions and it is more useful to consider classifying child fire-starters according to other factors, such as intensity of curiosity, or angry feelings associated with fire association. Several works provide a review of relevant literature on factors associated with child and adolescent fire-setting<sup>1</sup>. The information provided below is a distillation of the material available in these more complete reports.

### ***Fire interest***

Most children experience fire interest between the ages of 3 years and 5 years. This interest can be expressed in a number of ways, for example, asking questions about fire or incorporating fire-related themes in play. The questions often focus on the physical properties of fire, such as how hot a fire is or what makes a fire burn. The fire play frequently involves wearing fire hats, playing with toy fire trucks, and cooking food on toy stoves. These activities are healthy and provide children with ways to explore and understand fire as a productive and useful part of their lives. However, younger children have a limited understanding of cause and effect and are therefore more at risk of fire with limited supervision and fire safety skills at their disposal.

### ***Fire-starting***

Fire-starting occurs when children experiment with ignition sources such as matches and lighters. A majority of children will engage in at least one unsupervised fire-start. Most of these unsupervised fire-starts are single episodes motivated primarily by curiosity. This can involve experimenting with matches and burning pieces of paper - often while hiding in bedrooms or cupboards. In general, fires resulting from these incidents are accidental

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<sup>1</sup> See Lambie, McCardle, & Coleman, 2002; Lowenstein, 2001; Mavromatis, 2000; Slavkin, 2001; and, Slavkin & Fineman, 2000. Barker (1994) also provides a comprehensive account of factors associated with fire-setting from childhood through to adolescence, although she does not specifically address the issue of progression of fire-setting behaviour through the developmental spectrum.

or unintentional. They are started with available ignition sources and there is no typical target for these fires. If these fires get out of control, often children will make an attempt either to put the fire out or to go for help - but not always. For instance, Dittmann (2004) reports on a case of a 4-year-old boy who set stuffed animals ablaze with a lighter while playing on his bed. He then shut the door and joined the family for dinner, leaving the room to burn. Over \$100 000 in damages resulted. When asked why he did not tell anyone, the boy replied "I thought if I closed the door it would go away" (p. 1). While a curiosity about fire is universal, it appears that fire-setter children are less fire competent than are non-fire-setters. We also find that these children report greater exposure to fire and more ready access to fire tools.

Usually fire starting drops off during the early primary school years with fire education, then resurfaces in late primary / early secondary school through carelessness or delinquency. If children continue to participate in more than one supervised fire-start, the probability of starting a significant fire increases dramatically. It is, therefore, very important not only to discourage unsupervised fire-starts, but also to provide a solid education in fire safety to children to prevent unsupervised experimentation.

### ***Fire-setting***

The shift in the pattern from fire-start to fire-setting is associated with a variety of other changes that accompany adolescence: increasing independence, greater freedom from parental involvement; greater reliance on peer-group. Repeated fire-setting is seen in children aged between 7 years and 10 years who understand the rules of fire safety but continue to light fires, mainly in secret. These children are likely to have difficulties in regulating intense emotions, such as anger and frustration, and are more impulsive.

This type of fire-setting can lead to more serious problems if ignored. All fires set by juveniles need to be taken seriously. The size of the fire and the amount of damage are not good indicators of risk. Very often, juveniles who set fires start with small insignificant fires, graduating to bigger, more daring blazes as they acquire confidence and experience. Fire investigators should address today's small fires as though they could become tomorrow's fatal fires (Schwartzman, Stambaugh, & Kimball, 1999, p. 6).

Fire-setting at this stage in development can be motivated by psychological or social problems, but not in all cases. The fires tend to be planned, take place over several weeks, months or even years and, the severity of the fires varies. The primary motivation is boredom, anger, attention seeking, or revenge. Once the fire is started, the fire-setter will rarely make an attempt to extinguish it. If the child is lighting fires repeatedly, alone, and in secret, this should serve as a red flag for involved professionals that further investigation of the child's situation / behaviour is required.

### **Summary and Conclusion**

The impression we are left with is a child who has been repeatedly exposed to fire at a young age who generally lives with limited adult supervision or guidance. The child develops a natural curiosity for fire which develops into a fascination associated with heightened emotional arousal. With heightened arousal comes increased impulsivity. The

child is already impulsive by nature and in stressful situations his (or, less frequently, her) impulsiveness increases. The child then resorts to fire setting in an attempt to regulate the strong negative emotions he or she is experiencing. These children are particularly at risk because they conduct their activities in secret and may over-estimate their fire competence. Further, professionals focused on treating different types of problems may tend to overlook serial arson in children (Dittmann, 2004). Therefore, any professional dealing with behaviourally disturbed children needs to ask the child questions about their involvement with fire and fire-related tools.

### **Profile of the “typical” child fire-setter**

- Male
- Behavioural disturbance (hyperactivity, Attention Deficit Disorder; Attention Deficit Hyperactivity Disorder); often a history of substance abuse (especially alcohol); poor academic performance (truancy, suspension; general problems at school)
- Possible psychological disorder (conduct disorder, intellectual disability, personality disorder); suicidal ideation (Lowenstein, 2001)
- These characteristics are common to a range of delinquents, but when compared to non-fire-setters, fire-setters demonstrate a greater range and intensity of emotional and behavioural disturbance (Martin et al, 2004).
- Usually started lighting fires around 5yrs old, but some as young as 12 months and some as late as 14 yrs (Stanley, 2002). This behaviour forms part of a consistent pattern of delinquency that appears to escalate. Fire-setters have greater levels of anti-social acts than non-fire-setters (more frequent acts).
- Most light more than one fire with an average of 7 fires prior to detection
- Likely to be known to social services (family dysfunctional, prior delinquency); possibly taken into care at some time
- Motive: express intense emotions such as anger, attention seeking; cry for help; boredom
- Target: own home / residence; usually in company of others.

### **About The Author**

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Dr Rebekah Doley is an Australia-based psychologist specialising in the psychology of deliberate fire-setting. She has completed studies on serial arson in the United Kingdom, New Zealand and Australia and frequently works with mental health professionals as well as emergency service personnel internationally and domestically. Further articles on the psychology of arson are available at [www.firefocus.net](http://www.firefocus.net).

## References

- Barker, A. (1994). "Arson: A review of the psychiatric literature." Maudsley Monographs No. 35: 110.
- Barreto, S., Boekamp, J., Armstrong, L., & Gillen, P. (2004). Community-based interventions for juvenile firestarters: A brief family-centered model. *Psychological Services, 1*(2), 158-168.
- Dittmann, M. (2005). *Stopping young fire-starters: Firefighters, psychologists and other community professionals work together to extinguish juvenile fire-setting*. Retrieved 2 August, 2005, from <http://www.apa.org/monitor/julaug04/stopping.html>
- Lambie, I., S. McCardle, et al. (2002). "Where there's smoke there's fire: Firesetting behaviour in children and adolescents." New Zealand Journal of Psychology 31(2): 73-78.
- Lowenstein, L. (2001). "Recent research into arson (1992-2000) incidence, causes and associated features, predictions, comparative studies, and prevention and treatment." The Police Journal 74(2): 108-119.
- Martin, G., Bergen, H., Richardson, A., Roeger, L., & Allison, S. (2004). Correlates of firesetting in a community sample of young adolescents. *Australian and New Zealand Journal of Psychiatry, 38*, 148-154.
- McCardle, S., Lambie, I., & Barker-Collo, S. (2004). *Adolescent firesetting: A New Zealand case-controlled study of risk factors for adolescent firesetting*. Auckland: University of Auckland.
- Mavromatis, M. (2000). Serial arson: Repetitive firesetting and pyromania. Serial offenders: Current thought, recent findings. L. Schlesinger. Boca Raton, USA, CRC: 67-101.
- Schwartzman, P., Stambaugh, H., & Kimball, J. (1994). *Arson and juveniles: Responding to the violence*. Retrieved August 15, 2005, from <http://www.usfa.fema.gov/downloads/txt/publications/tr-095.txt>.
- Slavkin, M. (2001). "Enuresis, firesetting, and cruelty to animals: Does the ego triad show predictive validity?" Adolescence 36(143): 461-466.
- Slavkin, M. and K. Fineman (2000). "What every professional who works with adolescents needs to know about firesetters." Adolescence 35(140): 759-773.
- Stanley, J. (2002). "Preventing children and young people lighting bushfires in Australia." Child Abuse Prevention Newsletter 10(2): 6-11.